



ACADEMY

NEWSLETTER OF THE CALIFORNIA ACADEMY OF SCIENCES

HOME OF
STEINHART
AQUARIUM,
MORRISON
PLANETARIUM,
NATURAL
HISTORY
MUSEUM



SPECIAL LECTURE

BONOBO



Courtesy of Frans Lanting

THE FORGOTTEN APE

Traditional anthropological theories have presented humans as "killer apes" flourishing by means of aggression and violence. Behavioral models such as baboons and chimpanzees support this viewpoint, but the bonobo, one of the last large mammals discovered by science, is raising questions all over the previously accepted evolutionary map of our species.

Frans B. M. de Waal, C. H. Candler Professor of Primate Behavior and author of *Chimpanzee Politics* and *Peacemaking Among Primates*, has been studying the bonobo since the mid-1980s. Working with wildlife photographer Frans Lanting, he has recently published *Bonobo: The Forgotten Ape*, the first in-depth profile of the animal. Join him as he explains the bonobo's peaceful matriarchy founded on a code of sensitivity and affection. This unique egalitarian society offers a provocative alternative to the established model of human evolution, which emphasizes male-dominance and the inevitability of power struggles.

The lecture will be preceded by a cocktail reception at 6:30 p.m., and followed by a book-signing at 8:30 p.m.

Monday, June 9 — 7:30 p.m. (auditorium)
(reception 6:30 p.m.)

Lecture only:

\$6 members/\$10 nonmembers

Reception and Lecture:

\$36 members/\$45 nonmembers

This lecture is presented in collaboration with the L.S.B. Leakey Foundation. Please use the order form for tickets, or call (415) 750-7128.

MESSAGE FROM THE DIRECTOR



One of the few things we can truly count on is change. Even in the field of paleontology, which focuses its studies on events that occurred millions of years ago, that which we understand to be scientific "truth" changes almost continually.

As things change around us, whether we consider the vast environmental changes caused by human intervention, or changes in a typical museum visitor influenced by factors such as rapid advances in communications technologies, one thing is clear; The California Academy of Sciences is subject to the same forces of change that everyone and everything else is.

In the face of this change, the Academy has two choices; to adapt and hopefully to thrive, or to resist the changes around us and hope to survive. I do not hesitate to tell you that our choice is to thrive.

One thing that has not changed in the Academy's 143 year history is its



mission; to explore and explain the natural world. And that mission continues to act as our guiding force. To each new issue, problem, or opportunity that confronts us, the board and management of the Academy respond first by

asking the question, "What action will allow us to best fulfill our scientific and educational mission?"

Change inevitably involves some sense of loss, particularly when space and resources are limited. However, when well managed, change can bring previously unimagined opportunities and benefit.

In the coming months and years, we will continue to look for the best ways to serve you and the scientific community and will try our best to keep you informed as to what we are planning and why. I hope that you will trust that the Academy's leadership and staff will continue to put the mission first in all decision making. However, as always, we welcome your comments and questions about the activities of the Academy.

DINOSAUR ADVENTURE

JUNE 7 THROUGH SEPTEMBER 1

They're baaaack! The Academy's summer experience brings roaring, stomping, and very realistic dinosaurs to the Academy in an exhilarating exhibit of prehistoric discovery. Enormous robotic dinosaurs provide the visual backdrop for a dynamic series of hands-on activities celebrating the search, study and science of dinosaurs. Visitors will become dinosaur detectives at the Academy's authentic Dinosaur Dig site, ferreting out fossils and tracking down clues to the sizes, shapes and behavior of Earth's great prehistoric land dwellers.

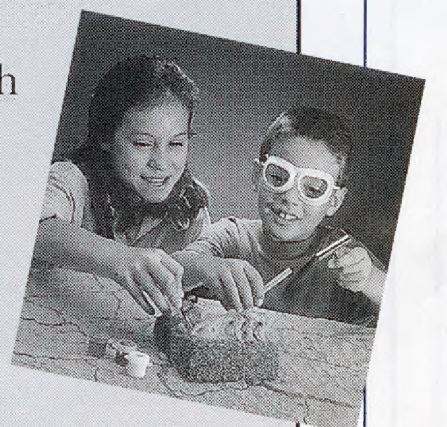


DINOSAUR ADVENTURE STORE

The Dinosaur Adventure Store opens June 7, with a full range of dinosaur equipment for explorers of all ages!

Kids fascinated by the exhibit will feel like paleontologists themselves with "I Dig Dinosaurs," an excavation kit with a replica of a fossilized skull for children to unearth with a hammer and chisel, the tools of the trade. Once excavated, the prize can be assembled, painted, and mounted, just like in a museum. Also for sale in the Adventure Store will be a full range of dino-related toys and gifts.

Present your membership card for a 10% discount on all purchases.



Charles Darwin: Live and in Concert

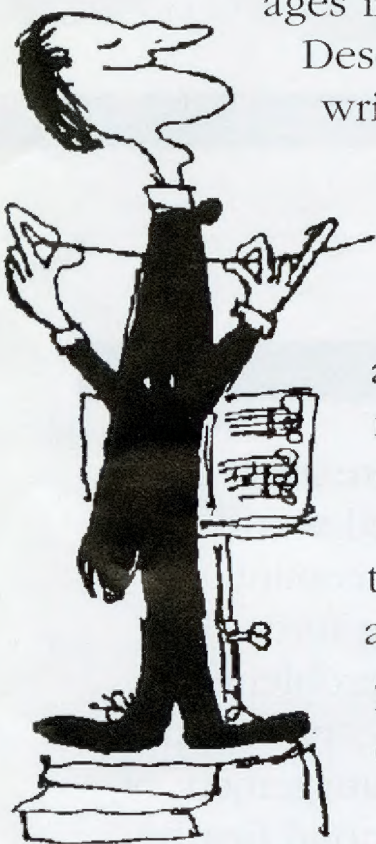
Cambridge historian James Moore has described Dr. Richard Milner's *Charles Darwin: Evolution of a Naturalist* as "the finest short biography of Darwin in existence." Milner's desire to "know Darwin the man" is what makes his approach unique and superlative.

Milner also brings this approach to his performances, which have been widely acclaimed by audiences of all ages in America, the United Kingdom, and Germany.

Described as a historian of science, author, songwriter, dramatist, and self-proclaimed "maverick anthropologist," he uses this vast array of talents to present Darwin not only as a scientist, but as a recognizable human being as well. Milner blends music with his own lyrics and drama (often appearing as Darwin himself) into a dynamic one-man show which communicates Darwin's theories in an exciting and understandable way, and demonstrates how evolution transcended science to impact philosophy, law, art, literature, cinema, and popular culture.

Tuesday, June 3 — 7:30 p.m. (auditorium)
(book-signing 8:30 p.m.)

\$6 members/\$10 nonmembers



CRICKET KEEPING IN CHINA AND JAPAN

In Asia, the cricket is the subject of intimate pillow talk, avid collecting and lively gambling matches. *Insect Musicians & Cricket Champions* by Lisa Ryan celebrates the social history of the cricket and examines its long and intricate relationship with mankind.

In China and Japan, crickets are mythological symbols, artistic subjects and literary metaphors. Ryan will take an engaging look at how people of these countries have been influenced by these insect neighbors.

Please join us for this special lecture in the auditorium at 7:30 p.m. A book-signing will follow the lecture at 8:30 p.m.

Thursday, May 8 — 7:30 p.m. (auditorium)
\$6 members/ \$10 nonmembers

Discover the natural world through Special Lectures, which feature authors and experts speaking on a variety of natural history topics. Please use newsletter order form for tickets, or call (415) 750-7128.

A WORLD OF DIFFERENCE with Academy Travel

EXPLORING THE LESSER ANTILLES AND ORINOCO RIVER

WITH CARL FERRARIS ABOARD
MV YORKTOWN CLIPPER

This voyage encompasses areas in the Lesser Antilles and northern Venezuela generously endowed with natural beauty. The vast Orinoco basin lies between the coastal ranges of the Venezuelan Andes to the north, the Columbian Andes to the west and the Great Guinana Shield to the south and east. The Orinoco River is nearly 1,600 miles long, and the tour will follow its winding course for several days, coming face-to-face with complex ecosystems that are rich in exotic flora and fauna.

Along the way we will visit Bonaire's Marine Park and make a stop at Isla Caracas in Venezuela's Mochimas National Park, home to beautiful beaches and coral reefs.

The *Yorktown Clipper* is perfect for this voyage. Her shallow draft and great maneuverability allow her to enter areas big cruise ships could never consider.

December 22 through January 2
Cost: to come

For detailed itineraries on this tour, please call Deidre Kernan or Nancy Fuller at (415) 750-7348.

Herbst lectures take place at the Herbst Theatre, located at 401 Van Ness (at McAllister). All lectures take place at 8:00 p.m. To order tickets and for more information, please contact City Box Office at (415) 392-4400.

FRANK J. SULLOWAY

Science Historian

Frank J. Sulloway is known for his study of the influence of birth order on personality, and the profound consequences of sibling competition on families and society as a whole. The results of his study are published in *Born to Rebel: Birth Order, Family Dynamics, and Revolutionary Genius*. Sulloway has transformed our basic ideas of personality development, and offers a new understanding of how family dynamics cause siblings to differ.

Frank Sulloway is an M.I.T. Research Scholar, and author of *Freud: Biologist of the Mind*. He will speak as part of the Herbst Lecture Series on Monday, May 5.



OPEN HOUSE FOR MEMBERS

Pack up the family and head for the Academy! It's spring, and it's time for the Annual Open House for you, our members.



Open House is an annual chance for members to meet one another and get a behind-the-scenes look at the Academy's research department and aquarium.

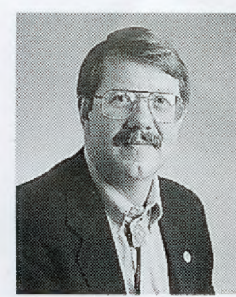
This event is designed to offer our members a greater insight into the resources which shape the Academy's past, present and future.

A strolling violinist will serenade you as you enjoy a special dinner at a nominal fee, and children will pick up a Super Science Sticker/Stamper Passport to take to each department. A special surprise will be given for completed, stamped passports at the end of the evening.

Open House is our way of saying "Thank you," and of sharing what we know and are in the process of learning.

Wednesday, May 14 — 6 to 9 p.m.

Members Open House is an exclusive benefit for members only. Guests of members are \$10 for adults, and \$5 for children. This is a perfect time to invite your friends to become members so they may attend this event with you. A gift membership offers excellent year-round benefits and helps support education and research at the Academy. See the order form on the back cover to order a gift membership, or call (415) 750-7111 to order a membership.



Dr. Torrence V. Johnson

GALILEO MOON

On December 1, 1997, the Galileo spacecraft acquired a close-up view of the Galilean moon Europa.

The Galileo spacecraft, named for the astronomer Galileo Galilei, has discovered four large moons, is conducting a comprehensive exploration of the Jupiter system.

Galileo's experiments have revealed the atmosphere, documented the domain ruled by Jupiter's magnetic field, and studied the large moon Io, a volcano-riddled world. The mission has already uncovered details of the mid-way through its mission, Galileo has already uncovered details of the deep interiors, the magnetic field around a planet, and studied the geology of the worlds. Features similar to Earth and mid-ocean ridge systems were found on the surface of Europa, suggesting an ocean which may still contain life.

As part of the Benjamin Franklin Lecture Series at the Morrison Planetarium, Chief Scientist for the Galileo mission will present the mission's findings to the public.

Tuesday, May 13 — 7:30 p.m.
Tickets: \$3

The Spring '97 B. Dean Lecture series is a family evening of storytelling with a science theme. June 24. Call 750-7141 for additional information.

MAY SKY

Sky Show/Description

Tales of a Comet
through September 7

Other Worlds
through June 15

Startalk

Neighbors in Space

Please note that on Memorial Day, the weekend schedule. Tickets are available before the show (box office opens at 10:00 a.m. box office once inside the Academy youth & seniors). Members must reserve the box office before entering the theater. 6 years old with you, please ask the staff. For more information, please call 750-7141.

LECTURE

DR. C.J. PETERS

Virologist, Author

Dr. C.J. Peters has been on the front lines for three decades in the biological war against lethally infectious viruses in South America, the United States and Africa. In his book *Virus Hunter*, he recounts his battle against these diseases, from investigating equine encephalitis to containing Ebola. Peters will offer his own perspective on the clash between biology and humanity, and on the threat emerging viruses pose to our species.

Dr. Peters is chief of the Viral Special Pathogens Branch at the Centers for Disease Control (CDC) in Atlanta. He has appeared on *CBS Evening News*, *NBC Nightly News*, *Larry King Live* and CNN. This lecture will be presented at the Herbst Theatre Thursday, May 15.

These lectures are presented as part of "Conversations at Herbst Theatre," a lecture series sponsored by the California Academy of Sciences and City Arts & Lectures through a grant from the Richard & Rhoda Goldman Fund.

Y LECTURE

AT JUPITER: A NEW OR AN OLD PLANET

er 7, 1995 Jupiter
new artificial moon.
orbiter spacecraft,
he discoverer of Jupiter's
ducting the most exten-
siter system to date.
have probed the Jovian
the nature of the huge
intense magnetic field,
ns from
en Callisto,
l. Only
n, Galileo
ails of the
discovered
moon,
f these
sea ice
ms on
smooth, icy
ing an ancient hidden
tain liquid water.
n Dean Lecture Series in
Dr. Torrence V. Johnson,
leo mission, will review
ate.



Ridges on Europa.

m.
es will conclude with a special
Dr. Amy Spaulding on Tuesday,
l information.

ARIUM

SHOWS

Weekday	Weekend
2 p.m.	2 & 4 p.m.
—	1 & 3 p.m.
—	12:00 p.m.
—	11:00 p.m.

May 26, shows will run according
a be purchased one-half hour
10:30 a.m. on weekends) at the
of Sciences (\$2.50 adults/\$1.25
eem their passes for tickets at
eater. If you have a child under
cashier for a Child's Pass.
50-7141.



WILDLIFE CONSERVATION SERIES

NETWORKING WITH NATIONS TO BUILD WILDLIFE HIGHWAYS

Dr. Archie Carr III

The New World's best known
cat species owes its sprawling
range to the Central American
land bridge, which spans from
Patagonia to northern Canada.
To protect this "biological high-
way," Dr. Archie Carr III, the
Wildlife Conservation Society's
regional coordinator for
Mesoamerica and the Caribbean,
pioneered a conservation strate-
gy in 1987 called *Paseo Pantera*, or
Path of the Panther. This path is an
unbroken corridor of connected parks
and protected areas for wildlife
throughout Central America.

For the past ten years, Dr. Carr
has worked with all Central American
countries to keep the corridor a reality.
Now called the Mesoamerica Biological
Corridor, the program represents one
of the world's most successful exam-
ples of multi-national cooperation in
the name of conservation. The lecture
is part of the Wildlife Talks Series,
co-sponsored by the Academy of
Sciences and the WCS. It will be
preceded by a reception at 6:30 p.m.,
and will take place in the auditorium.

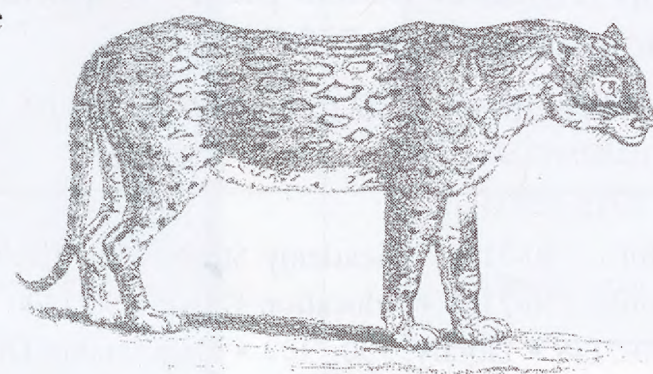
Tuesday, June 10 — 7:30 p.m.
(auditorium)

6:30 p.m. reception

Lecture only:
\$6 members/\$10 nonmembers

Reception and Lecture:
\$36 members/\$45 nonmembers

For more information,
visit the WCS website
at www.wcs.org.
For tickets, use the
order form or call
415-750-7128.



State Museum of St. Petersburg Director Ivan Sautov, American Museum of Natural History Entomologist and amber exhibit curator Dr. David Grimaldi, and California Academy of Sciences Executive Director Dr. Evelyn Handler welcomed guests to the opening of *Amber: Window to the Past*.

ADULT EDUCATION

GENDER & THE BRAIN: MODERN STUDIES COMPARING FEMALES & MALES

Modern anatomical, physiological and imaging stud-
ies of the brain have revealed many differences
between males and females of several vertebrate
species, including humans. This presentation will range from
subjects concerning brains of song birds to differences in
language areas between men and women. Anatomical differ-
ences, hormonal influences and regulation, developmental
events, pain perception and tolerance all are important
components. Is the current literature convincing? Come
explore this fascinating topic with Drs. Diane and Peter
Ralston and draw your own conclusions based on the
most recent scientific studies.

May 13 — 7 p.m. to 9 p.m.

\$12 members/\$15 nonmembers

NATURAL HISTORY & ARCHAEOLOGY OF LAKE COUNTY

The Clear Lake region is a diverse natural
area with a long and intriguing history of
human occupation. The plentiful plant and ani-
mal life around the lake have attracted set-
tlers for hundreds of years, and the ancient
rocks of the Coast Range basement and
recent volcanic activity have provided the
local inhabitants with important trading
materials. See how the natives of the area,
and the Californians who followed them,
used the abundant natural resources of the
region. Just in time for the spring bloom, instructors
Jean DeMouthe and Barry Anderson will host this tour
of a rich and colorful habitat.

May 16 – 18

Cost: \$175 members/\$190 non-members (double occupancy)
\$125 members/\$140 non-members (without accomodations)
(food and transportation not included)

BREEDING BIRDS OF PEPPERWOOD

Mid-May is the perfect time to see and hear a
dazzling array of birds at the peak of their
breeding activity, and the Academy's lush
3,000 acre nature preserve in Sonoma
County is the perfect place. Join instructor
David Wimpfheimer for an exploration of
the preserve's habitats, each home to specific
groups of birds. An evening walk on Saturday
will feature observation and discussion of
nocturnal bird species, such as the owl.

9 a.m. Saturday, May 17 to 3 p.m. Sunday, May 18

Cost: \$95 members/\$110 nonmembers

Participants will need to provide their own sleeping bags,
pads, transportation and food.

To register and for more information about these and other classes, use the
order form or contact the adult and family education program at (415) 750-7100.



SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

3 Saturday

The History of British
Town Crying, 1 p.m.
(Traditional Arts)

8 Thursday

Cricket Keeping In China
and Japan, 7:30 p.m.
(Special Lecture)

10 Saturday

Scottish Tartan Weaving,
1 p.m. (Traditional Arts)

13 Tuesday

Galileo at Jupiter, 7:30 p.m.
(B.Dean Lecture)

14 Wednesday

Members Open House,
6 p.m.

17 Saturday

Welsh Wheat Weaving,
1 p.m. (Traditional Arts)

18 Sunday

Robert Henry Johnson
Dance Company, 1 p.m.
(Young Audiences)

24 Saturday

Scottish Pipe Band-
Dunvegan, 1 p.m.
(Traditional Arts)

26 Monday

Weekend Sky Show schedule
in effect for Memorial Day

31 Saturday

English Morris Dancing,
1 p.m. (Traditional Arts)

FUTURE DATES TO REMEMBER

June 7 *Dinosaur Adventure* opens;
June 10 Networking with Nations
(WCS); **June 11** Human Origins, with
Blake Edgar (Members Lecture)

VISITOR INFORMATION

Special Exhibitions: "Folk Toys: The
Playful Arts of Japan," through June
• "Rugs of Teec Nos Pos: Jewels of the
Navajo Loom," through September 27.
• **Feeding Times:** Fish Roundabout,
2 p.m.; Penguins, 11:30 a.m. & 4 p.m.
• **Guided Tours:** Free one-hour high-
light tours daily. • **Laserium Shows:**
Thu.-Sun. evenings. • **Free Day:** First
Wed. of each month. • **Hours:** Open
every day of the year. Winter hours
10 a.m.-5 p.m. Summer hours (Mem-
orial Day weekend to Labor Day)
9 a.m.-6 p.m. • **Information:** Hotline
(415) 750-7145, World Wide Web site
<http://www.calacademy.org>

**California Academy of Sciences**

Golden Gate Park
San Francisco, CA 94118-4599

Address Correction Requested
TIME-DATED MATERIAL

ORDER FORM

Nonprofit Organization
U.S. Postage Paid
Permit No. 3565
San Francisco, CA

ADULT EDUCATION	Qty/Members	Qty/Nonmembers	Total	SPECIAL LECTURES	Qty/Members	Qty/Nonmembers	Total
Please call (415) 750-7100 for availability.				Cricket Keeping in China and Japan / May 8 _____ X \$6 _____ X \$10 = _____			
Gender and the Brain / May 13 _____ X \$12		_____ X \$15	= _____	Charles Darwin: Live and In Concert / June 3 _____ X \$6		_____ X \$10	= _____
Natural History & Archaeology of Lake County / May 16-18				Bonobo: The Forgotten Ape / June 9			
Double occupancy _____ X \$175		_____ X \$190	= _____	Lecture only _____ X \$6		_____ X \$10	= _____
Without accommodations _____ X \$125		_____ X \$140	= _____	Lecture and reception _____ X \$36		_____ X \$45	= _____
Breeding Birds of Pepperwood / May 17-18 _____ X \$95		_____ X \$110	= _____				
B. DEAN ASTRONOMY LECTURE SERIES	Quantity		Total	SPECIAL LECTURES			
Galileo at Jupiter / May 13 _____ X \$3			= _____	Networking with Nations / June 10			
				Lecture only _____ X \$6		_____ X \$10	= _____
				Lecture and reception _____ X \$36		_____ X \$45	= _____
ESTATE PLANNING SEMINAR	Quantity		Total	DONATIONS			
Sophisticated Estate Planning / May 20 _____ X \$5			= _____	<input type="checkbox"/> I would like to support the Academy of Sciences with a donation. \$ _____ <input type="checkbox"/> Please send me information about life income gifts and bequests to the Academy			

GIFT MEMBERSHIP FORM

I wish to give a gift membership to: _____

Address _____ City _____

State _____ Zip _____ Phone () _____

_____ \$45 Individual _____ \$60 Family of Grandparent

_____ \$40 Dual Senior _____ \$35 Senior _____ \$125 Curators Circle

Payment enclosed: _____

TOTAL PAYMENT ENCLOSED \$ _____

☐ Check (make payable to CAS)

☐ Visa ☐ MasterCard ☐ American Express (\$10 minimum on credit card orders)

Card Number _____ Exp. Date _____

Daytime Phone _____

Mail payment and order form to: Membership Office, Ticket Services,
California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118-4599

Include a self-addressed, stamped envelope for each series to which you subscribe.
No refunds/exchanges.

TRADITIONAL ARTS

In collaboration with Britain Meets the Bay, a three-month festival celebrating U.K. Bay Area friendship and opportunity, the Traditional Arts Program is dedicating the month of May to British folkways.

THE HISTORY OF BRITISH TOWN CRYING

with Mr. Redmond O'Colonies

Town crying has diminished over the centuries with the advent of media in its many forms, but has yet to expire. Join Redmond O'Colonies in his presentation of the history of this tradition in Britain and throughout the world.

May 3 — 1 p.m.

SCOTTISH TARTAN WEAVING

with Ms. Jan Crook

Using a small treadle loom, textile artist Jan Crook demonstrates the weave structure of Scottish highland tartans, and discusses the historical development of clan patterns.

May 10 — 1 p.m.

WELSH WHEAT WEAVING

with Ms. Jan Southworth

Poor soil and hilly terrain make farming in Wales especially challenging. Perhaps for that reason, legends of the "corn spirit" abound and Wales is often called the home of British folklore. The provinces or counties of Wales are known as "bor-

ders", and the Welsh Border Fan was a traditional harvest symbol for all the counties. Jan Southworth demonstrates the construction of both the Welsh Fan and the Mordiford, or sweetheart love token.

May 17 — 1 p.m.

SCOTTISH PIPE BAND-DUNVEGAN

with Mr. Ozzie Reid

Mr. Ozzie Reid leads his Scottish pipe band, Dunvegan, donned in clan tartans in a presentation of Highland music.

May 24 — 1 p.m.

ENGLISH MORRIS DANCING

with Berkeley Morris

Berkeley Morris performs dances that originate largely from the village of Leafield, England. The style of dance for which the ensemble is known is called Cotswold. Come celebrate the seasonal rituals associated with the arrival of spring!

May 31 — 1 p.m.

Explore cultural traditions from around the world in these one-hour presentations held Saturdays in the auditorium. Free after general admission. Call (415) 750-7165 for more information.



SEMINAR: THE CALIFORNIA ACADEMY OF SCIENCES PRESENTS

SOPHISTICATED ESTATE PLANNING: BEYOND THE BASICS



Clare Springs, J.D. and William Hoehler, J.D. lead an advanced estate planning seminar for Academy members in May.

This seminar will explore estate planning ideas that go beyond the basics of wills and trusts, delving into advanced estate planning concepts which you may have seen in the news recently. For example, on December 22, the New York Times ran an article which stated "...the Federal estate tax has become so easy to avoid that some experts believe that much of it is voluntary, at least for those who start planning early."

Our experts will explore that statement and evaluate the pros and cons of planning tools like these: Qualified Personal Residence Trusts, Family Limited Partnerships, Irrevocable Life Insurance Trusts, Private Annuities, and Charitable Remainder Trusts.

Our speakers are two highly qualified estate planning experts, Clare Springs, J.D., partner of Springs, Rivin, Detwiler, Dudnick and Stikker; and William Hoehler, J.D., partner of Pillsbury, Madison & Sutro. Clare is a member of the Academy Board of Trustees, and both have presented popular estate planning programs for Academy members.

This seminar is designed for Academy members who are 50 years or older and who understand the basics of estate plans, including wills, living trusts and forms of property ownership. To order tickets please respond by May 10 and use the order form. For more information, please call 750-7216.

Tuesday, May 20 — 4:30 to 6:30 p.m. Cost: \$5 (Attendance is free for Eastwood Associates.)

WHOM TO CALL ☎ Academy Info, 750-7145 • Academy Store, 750-7410 • Aquarium, 750-7247 • Biodiversity Center, 750-7361 • Development Office, 750-7216 • Docent Tours, 750-7155 • Education Office, 750-7100 • Group Admissions, 750-7159 • Job Hotline, 750-7333 • Laserium, 750-7138 • Special Lectures, 750-7128 • Library, 750-7102 • Membership Office, 750-7111 • Planetarium, 750-7141 • Planned Giving, 750-7216 • Receptionist, 221-5100 • Security, 750-7000 • Travel, 750-7348 • Volunteer Services, 750-7154 • Weekend Information, 750-7375

© 1997 California Academy of Sciences — EDITOR, Samantha Moss / DESIGN, Johanna Dimayuga / PRINTING, Fruitridge Printing & Lithograph Inc. Printed on recycled paper with soy-based ink.

DEDICATED TO SCIENTIFIC RESEARCH & EDUCATION, INSPIRING RESPECT FOR THE NATURAL WORLD